

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application. In view of the above amendment, applicant believes the pending application is in condition for allowance.

Claims 1-7 and 9-16 are now present in this application. Claims 1 and 12 are independent. Claim 8 has been canceled, claims 12-16 have been added, and claims 1 and 4 have been amended. Reconsideration of this application, as amended, is respectfully requested.

Specification Objection

The Examiner has objected to the specification because of minor informalities. In order to overcome this objection, Applicants have amended the specification to correct the deficiencies pointed out by the Examiner. Reconsideration and withdrawal of this objection are respectfully requested.

Rejection Under 35 U.S.C. § 112, 2nd Paragraph

Regarding the rejection of claims 1-11 under 35 U.S.C. § 112, 2nd Paragraph, the preamble of independent claim 1 has been amended to recite "a refrigerating system comprising," to correct deficiencies pointed out by the Examiner. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Obviousness-Type Double Patenting Rejection

Claims 1 and 4-11 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of a copending U.S. Patent Application No. 10/539,301. Applicant will address this provisional rejection when allowable subject matter is indicated.

Rejections under 35 U.S.C. § 103

Claims 1-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Song et al. (hereinafter Song '842) in view of Song (hereinafter Song '842) and Morita et al. Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the references as applied to claim 1 and further in view of Chevron 600R. Claim 1 has been amended to include subject matter similar to that as recited in dependent claim 8. Accordingly, comments will be presented distinguishing claim 1 over the rejection of claim 8 under 35 U.S.C. § 103(a).

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Independent claim 1 includes a combination of elements and is directed to a refrigerating system including an evaporator, a reciprocating compressor, a condenser, a capillary tube, an organic compound refrigerant and a mineral based lubricant. As discussed above, independent claim 1 has been amended to include the subject matter similar to that as recited in dependent claim 8. In particular, amended independent claim 1 recites that the mineral-based lubricant has a density of 0.866~0.880 g/cm³ and a flash point of above 140 °C such that the mineral-based lubricant mixes with the organic compound refrigerant to perform the lubricating operation.

These features are supported at least by Figures 1 and 2. For example, the refrigerating system includes the evaporator 2, the reciprocating compressor 4, the condenser 6, the capillary tube 8, an organic compound refrigerant and a mineral based lubricant. Further, the specification lists the conditions for the mineral oil to have a "favorable compatibility with hydrocarbon" of the organic compound refrigerant, and to satisfy "physical and chemical characteristics" (see page 11, lines 19-21 and page 12, lines 2-7 of the specification)

Therefore, specific advantages are achieved with the claimed range. That is, as discussed in the specification at page 2, lines 19-22, it is difficult to use a mineral-based lubricant with an organic compound. The present invention solves these problems by selecting the specific density range and the flash point of the mineral-based lubricant.

On the contrary, Song '842 in view of Song '792 and Morita et al. do not teach or suggest these features of the invention. Further, although the Office Action states that Chevron 600R

teaches the conditions recited in previously presented claim 8 (see page 10 of the Office Action) and provides “superior cold-flow performance”, Chevron 600R does not teach or suggest that such conditions allow the mineral-based lubricant to mix with the organic compound refrigerant to perform the lubricating operation. Therefore, there is no motivation to combine the Chevron 600R reference and the references as applied in rejection of claim 1.

In addition, it appears that the Office Action combines bits and pieces from the four references together in an attempt to create a combination and method similar to that defined by the claim 8 of the present application. Thus, through a process of impermissible hindsight reconstruction, it appears that the Office Action reconstructs the teachings of the references in view of the Applicants’ own disclosure. *See, Grain Processing Corp. v. American Maize-Products Co.*, 840 F.2d 902, 907, 1792 (Fed. Cir. 1988) (stating “Care must be taken to avoid hindsight reconstruction by using ‘the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit’”). Further, as recently followed in *Alza Corp.*, the Federal Circuit has consistently held that an Examiner cannot use the claim of the Applicant “as a template . . . selecting elements from references to fill the gaps.” *Alza Corp. v. Mylan Pharma., Inc.*, 8 U.S.P.Q.2d 1001 (Fed. Cir. 2006). Such is the case here where the Examiner must rely on no less than four different references, each aimed at solving different problems than that which claim 8 is directed at addressing.

Accordingly, it is respectfully submitted that amended independent claim 1 and each of the claims depending therefrom are allowable.

Further, it is respectfully submitted the other 35 U.S.C. § 103(a) rejections have also been overcome as the claims rejected therein are dependent claims and the additional applied references also do not teach or suggest the features recited in the independent claim.

Claims Added

In addition, new claims 12-16 have been added for the Examiner’s consideration. In particular, new independent claim 12 recites similar features to the previous presented claim 1 and dependent claim 9, and clarifies that the lubricant has a kinematic viscosity of 7.2~21.8 mm²/s at a

temperature of 40 °C and a viscosity index of 73~99 such that the mineral-based lubricant mixes with the organic compound refrigerant to perform the lubricating operation. It is respectfully submitted the applied art also does not teach or suggest these features.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Jun S. Ha, Registration No. 58,508, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: December 20, 2007

Respectfully submitted,

By 

James T. Eller, Jr.

Registration No.: 39,538

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant